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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,661	04/29/2002	Lian-Hui Zhang	2577-127	5708
6449	7590	11/03/2005	EXAMINER	
ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005			KUBELIK, ANNE R	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.
10/019,661

Applicant(s)
ZHANG ET AL.

Examiner
Anne R. Kubelik

Art Unit
1638

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 26 September 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
 - a) The period for reply expires 4 months from the mailing date of the final rejection.
 - b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 - (a) They raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) They raise the issue of new matter (see NOTE below);
 - (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. Applicant's reply has overcome the following rejection(s): _____.
6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1, 3-5, 7, 10-13, 19-21.

Claim(s) withdrawn from consideration: _____

AFFIDAVIT OR OTHER EVIDENCE

8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. Other: _____

Continuation of 3. NOTE: New issues: 112, 1st: the specification does not describe bacterial isolates from plant and soil samples that contain a nucleic acid sequence coding for a protein with autoinducer inactivation activity.

Continuation of 11. does NOT place the application in condition for allowance because:

112, 1st, written description: Applicant urges that written description is satisfied. This is not found persuasive because the necessary and sufficient structural features of nucleic acids that encode AiiA proteins are not described within the full scope of the claims. The portion of the rejection about signal peptides is withdrawn. The specification also does not describe isolates for using in the methods of claims 19-21.

112, 1st, enablement: Applicant urges that hybridization is well-known, and the sequences for SEQ ID NO:1 and 2 are disclosed; the hybridization conditions mean that nucleic acids with 80% homology hybridize. Applicant urges that acceptable evidence as to lack of enablement has not been provided. This is not found persuasive. The specification does not teach bacterial isolates, other than the nonpublically available 240B1, from which nucleic acids that hybridize to SEQ ID NO:1 or nucleic acids that encode SEQ ID NO:2 can be found; it also does not teach how to make such nucleic acids. Applicant urges that working examples of transformed plants are not required and plants to use are identified. This is not found persuasive because Molina et al (2003, FEMS Microbiol. Ecol. 45:71-8) teach that application of lactonase-expressing bacterial strains eliminated the effectiveness of disease-suppressing bacteria, resulting in diseased plants (paragraph spanning the columns, pg 78). Zhang (2003, Trends Plant Sci. 8:238-244) teach that transformation of plants with another nucleic acid that encodes an enzyme that controls lactone levels resulted in disease resistant plants in one case, but more susceptible plants in the other, and suggest that these results mean fine-tuning is required to match host-pathogen combinations (paragraph spanning the columns, pg 242). As the specification provides no working example of disease resistant plants produced by the claimed method, the unpredictability taught by the art is not overcome. Applicant urges that the sequence for Bacillus sp. 240B1 is publically available, and pg 15 discloses bacterial isolates from plant and soil samples to use. This is not found persuasive because the specification does not teach the sequence for Bacillus 240B1, nor does it teach how to assemble a bacteria from its genomic sequence. The only isolate disclosed on pg 15 is 240B1. Thus, isolates that comprise nucleic acids that hybridize to SEQ ID NO:1 or nucleic acids that encode SEQ ID NO:2 (i.e., according to Applicant's arguments, nucleic acids with 80% identity to SEQ ID NO:1 or nucleic acids that encode SEQ ID NO:2).

112, 2nd, Applicant urges that Fig 4A teaches SEQ ID NO:1 and the specification teaches that the ATG starts at base 1 and the termination site is labeled by a thick underline. This is not persuasive as no such underline is present in the figure. It is suggested that "the coding portion of" be replaced with the bases that encode SEQ ID NO:2.

The website and textbook pages could not be considered because there was no showing of good and sufficient reasons why they are necessary and were not sent previously.



ANNE KUBELIK, PH.D.
PRIMARY EXAMINER